

## ABSTRACT

Operation of an electrochemical fuel cell may lead to formation of oxide and/or hydroxide layers forming on the surface of a platinum catalyst on the cathode electrode which may, in turn, lead to reduced fuel cell performance. Such formation oxides and hydroxides may be inhibited or even eliminated by alloying the platinum catalyst with less than 10% of a noble metal selected from rhodium, iridium, palladium and gold or a combination thereof.

C:\130109.492\457814\_1.DOC